

stances. For the Paper will usually appear of a bluish white; and the reason is, that black borders on the obscure blue of the first order described in the 18th Observation, and therefore reflects more rays of that Colour than of any other.

In these Descriptions I have been the more particular, because it is not impossible but that Microscopes may at length be improved to the discovery of the particles of Bodies on which their Colours depend, if they are not already in some measure arrived to that degree of perfection. For if those Instruments are or can be so far improved as with sufficient distinctness to represent Objects five or six hundred times bigger than at a Foot distance they appear to our naked Eyes, I should hope that we might be able to discover some of the greatest of those corpuscles. And by one that would magnify three or four thousand times perhaps they might all be discovered, but those which produce blackness. In the mean while I see nothing material in this Discourse that may rationally be doubted of excepting this Position, That transparent corpuscles of the same thickness and density with a Plate, do exhibit the same Colour. And this I would have understood not without some latitude, as well because those corpuscles may be of irregular Figures, and many rays must be obliquely incident on them, and so have a shorter way through them than the length of their Diameters, as because the straitness of the medium pent in on all sides within such corpuscles may a little alter its motions or other qualities on which the reflexion depends. But yet I cannot much suspect the last, because I have observed of some small Plates of Muscovy-Glass which were of an even

even thickness, that through a Microscope they have appeared of the same Colour at their edges and corners where the included medium was terminated, which they appeared of in other places. However it will add much to our satisfaction, if those corpuscles could be discovered with Microscopes; which if we shall at length attain to, I fear it will be the utmost improvement of this sense. For it seems impossible to see the more secret and noble works of nature within the corpuscles by reason of their transparency.

P R O P. VIII.

The cause of Reflexion is not the impinging of Light on the solid or impervious parts of Bodies, as is commonly believed.

This will appear by the following Considerations. First, That in the passage of Light out of Glass into Air there is a reflexion as strong as in its passage out of Air into Glass, or rather a little stronger, and by many degrees stronger than in its passage out of Glass into Water. And it seems not probable that Air should have more reflecting parts than Water or Glass. But if that should possibly be supposed, yet it will avail nothing; for the reflexion is as strong or stronger when the Air is drawn away from the Glass, (suppose in the Air-pump invented by Mr. Boyle) as when it is adjacent to it. Secondly, If Light in its passage out of Glass into Air be incident more obliquely than at an Angle of 40 or 41 degrees it is wholly reflected, if less obliquely it is in great measure transmitted. Now it is not to be imagined that Light at one degree of obliquity should meet

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